

PSI5720 – Spatial Audio Processing - Q6.

(a) Considering the speech signal telephone bandwidth (enough for intelligibility) of 300 - 3.4 KHz, what should be the microphone separation for a linear array of sensors to avoid spatial aliasing error.

(b) Suppose there are  $N$  mics placed as a linear array and another array with random placements (nearby). What would be the nature of beam selectivity pattern in the two types of arrays?